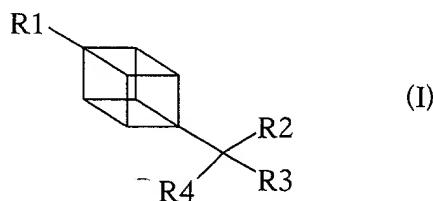


We claim:

1. A compound of the formula:



wherein:

**R1** can be an acidic group selected from the group consisting of carboxyl, phosphono, phosphino, sulfono, sulfino, borono, tetrazol, isoxazol, -CH<sub>2</sub>-carboxyl, -CH<sub>2</sub>-phosphono, -CH<sub>2</sub>-phosphino, -CH<sub>2</sub>-sulfono, -CH<sub>2</sub>-sulfino, -CH<sub>2</sub>-borono, -CH<sub>2</sub>-tetrazol, and -CH<sub>2</sub>-isoxazol;

**R2** can be a basic group selected from the group consisting of 1° amino, 2° amino, 3° amino, quaternary ammonium salts, aliphatic 1° amino, aliphatic 2° amino, aliphatic 3° amino, aliphatic quaternary ammonium salts, aromatic 1° amino, aromatic 2° amino, aromatic 3° amino, aromatic quaternary ammonium salts, imidazol, guanidino, boronoamino, allyl, urea, thiourea,

**R3** can be H, aliphatic, aromatic or heterocyclic;

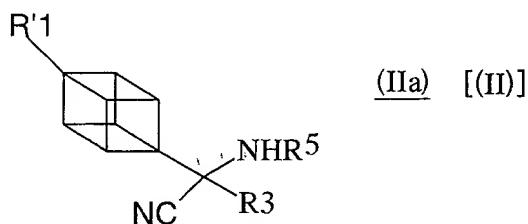
**R4** can be an acidic group selected from the group consisting of carboxyl, phosphono, phosphino, sulfono, sulfino, borono, tetrazol, isoxazol; and pharmaceutically acceptable salts thereof.

2. A compound as claimed in claim 1, wherein **R1** is COOH.
3. A compound as claimed in claim 1, wherein **R2** is NH<sub>2</sub>.

4. A compound as claimed in claim 1, wherein **R3** can be -H, or -Me; or xanthyl or thioxanthyl or -CH<sub>2</sub>-xanthyl, or -CH<sub>2</sub>-thioxanthyl and **R4** is -COOH.

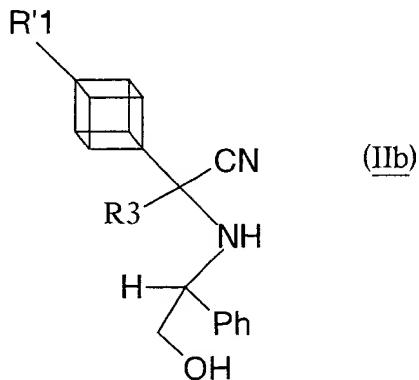
5. A process for the preparation of a compound of Formula I, or a pharmaceutically acceptable metabolically-labile ester or amide thereof, or a pharmaceutically acceptable salt thereof, which comprises:

(a) hydrolyzing a compound of formula:



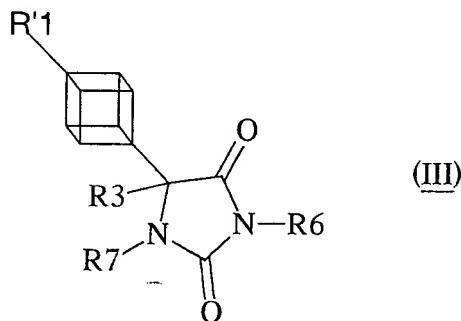
wherein: **R'1** is an acidic group selected from the group consisting of carboxyl, phosphono, phosphino, sulfono, sulfino, borono, tetrazol, isoxazol, -CH<sub>2</sub>-carboxyl, -CH<sub>2</sub>-phosphono, -CH<sub>2</sub>-phosphino, -CH<sub>2</sub>-sulfono, -CH<sub>2</sub>-sulfino, -CH<sub>2</sub>-borono, -CH<sub>2</sub>-tetrazol, -CH<sub>2</sub>-isoxazol and higher analogues thereof, or a protected form thereof, **R3** can be H, aliphatic, aromatic or heterocyclic and [in which **R1** is defined as above,] **R5** represents a hydrogen atom or an acyl group [and **R4** has the meaning defined above.], and wherein [P]preferred values for **R5** are hydrogen and (2-6C) alkanoyl groups, such as acetyl; or

(b) deprotecting and hydrolyzing a compound of formula (II b)



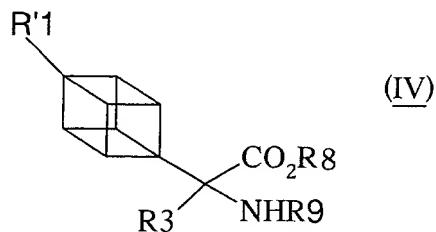
wherein: **R'1** and **R3** are as defined above; or

(c) [b] hydrolyzing a compound of formula:



wherein:  $\text{R}6$  and  $\text{R}7$  each independently represent a hydrogen atom, a (2-6C) alkanoyl group, a (1-4C) alkyl group, a (3-4C) alkenyl group or a phenyl (1-4C) alkyl group in which the phenyl is unsubstituted or substituted by halogen, (1-4C) alkyl or (1-4C) alkoxy, or a salt thereof,  $\text{R}'1$  and  $\text{R}3$  are as defined above; or

(d) [c] deprotecting a compound of formula:



wherein: [in which]  $\text{R}8$  represents a hydrogen atom or a carboxyl protecting group, or a salt thereof, and  $\text{R}9$  represents a hydrogen atom or a nitrogen protecting group,  $\text{R}'1$  and  $\text{R}3$  are as defined above;

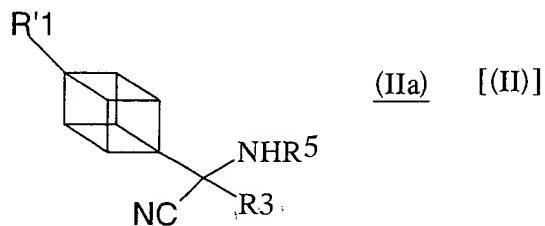
whereafter, if necessary and/or desired:

- (i) resolving the compound of Formula I;
- (ii) converting the compound of Formula I into a non-toxic metabolically-labile ester or amide thereof; and/or[;]
- (iii) converting the compound of Formula I or a non-toxic metabolically-labile ester or amide thereof into a pharmaceutically acceptable salt thereof.

6. A pharmaceutical formulation, which comprises a compound as claimed in claim 1 and a pharmaceutically acceptable carrier, diluent or excipient.

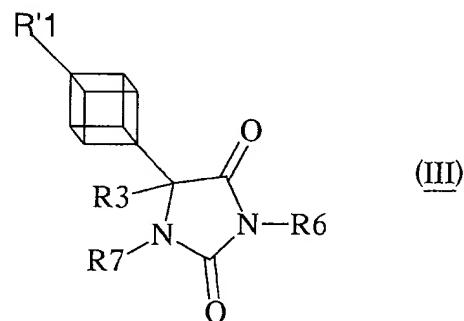
7. A use of the compound according to claim 1 to modulate [A method of modulating] one or more metabotropic glutamate receptor functions in a warm blooded mammal [requiring such treatment], wherein said use [which] comprises administering an effective amount of a compound of formula (I) as claimed in claim 1.

8. A compound of formula:



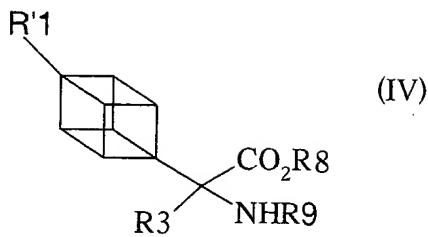
wherein: **R'1**, **R3** and **R5** have the meanings as defined in claim 5 [in which **R1**, **R4** and **R5** have the meanings as defined above].

9. A compound of formula:



wherein: **R'1**, **R3**, **R6** and **R7** have meanings as defined in claim 5 [wherein **R6** and **R7** have meanings as defined above].

10. A compound of formula:



wherein:  $R'1$ ,  $R3$ ,  $R8$  and  $R9$  have meanings as defined in claim 5 [in which  $R8$  and  $R9$  have meanings as defined above].

11. A compound according to claim 1, wherein  $R1$  is  $-COOH$ ,  $R2$  is  $-NH_2$ ,  $R3$  is  $H$  and  $R4$  is  $COOH$ .

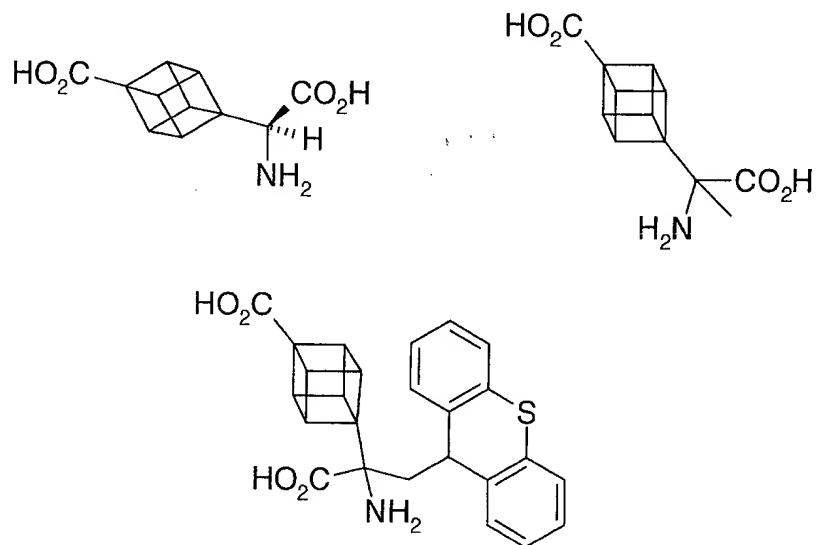
12. A compound according to claim 1, wherein  $R1$  is  $-COOH$ ,  $R2$  is  $-NH_2$ ,  $R3$  is  $CH_3$  and  $R4$  is  $COOH$ .

13. A compound according to claim 1, wherein  $R1$  is  $-COOH$ ,  $R2$  is  $-NH_2$ ,  $R3$  is  $-CH_2-$ thioxanthyl and  $R4$  is  $COOH$ .

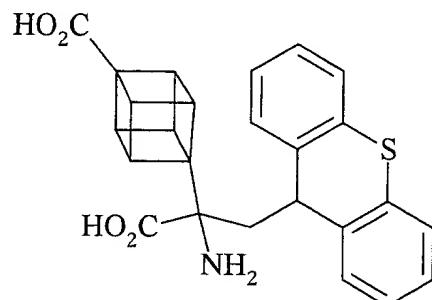
14. A use of the compound according to claim 1 for the treatment of a neurological disease or disorder selected from the group comprising: cerebral deficits subsequent to cardiac bypass surgery and grafting, cerebral ischemia, stroke, cardiac arrest, spinal cord trauma, head trauma, perinatal hypoxia, and hypoglycemic neuronal damage, Alzheimer's disease, Huntington's Chorea, amyotrophic lateral sclerosis, AIDS-induced dementia, ocular damage, retinopathy, cognitive disorders, idiopathic and drug-induced Parkinson's disease, muscular spasms, convulsions, migraine headaches, urinary incontinence, psychosis, drug tolerance, withdrawal, and cessation (i.e. opiates, benzodiazepines, nicotine, cocaine, or ethanol), smoking cessation, anxiety and related disorders (e.g. panic attack), emesis, brain edema, chronic pain, sleep disorders, Tourette's syndrome, attention deficit disorder, and tardive dyskinesia, wherein said use comprises administering an effective amount of a compound of formula (I).

15. A use of the compound according to claim 1 for the treatment of a psychiatric disease or disorder selected from the group comprising: schizophrenia, anxiety and related disorders (e.g. panic attack), depression, bipolar disorders, psychosis, and obsessive compulsive disorders, wherein said use comprises administering an effective amount of a compound of formula (I).

16. The use according to any one of claims 7, 14 or 15 wherein said compound is selected from the group of compounds comprising :

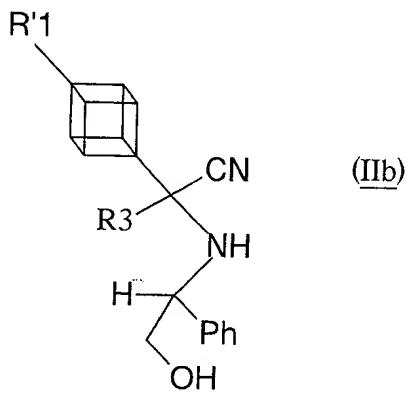


17. A use of the compound:



for the treatment of cerebral ischemia, stroke and cardiac arrest, wherein said use comprises administering an effective amount of the said compound.

18. A compound of formula:



wherein:  $R'1$  and  $R3$  have the meaning as defined in claim 5.

19. A compound according to claim 18, wherein:  $R'1$  is  $-COOMe$ ,  $R3$  is  $H$ .

20. A compound according to claim 9, wherein:  $R'1$  is  $-COOH$ ,  $R3$  is  $CH_3$ ,  $R6 = R7$  is  $H$ .

21. A compound according to claim 9, wherein:  $R'1$  is  $-COOH$ ,  $R3$  is  $-CH_2\text{-thioxanthyl}$ ,  $R6 = R7$  is  $H$ .